

PTO/SB/21 (03-03)

Approved for use through 04/30/2003. OMB 0651-0031

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number 10/620,007

Filing Date July 15, 2003

First Named Inventor Locke et al.

Art Unit

Examiner Name

Attorney Docket Number 3303-24

**ENCLOSURES (Check all that apply)**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Fee Transmittal Form                                | <input type="checkbox"/> Drawing(s)                                       | <input type="checkbox"/> After Allowance Communication to a Technology Center (TC)      |
| <input type="checkbox"/> Fee Attached  | <input type="checkbox"/> Licensing-related Papers                         | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences     |
| <input type="checkbox"/> Amendment/Reply                                     | <input type="checkbox"/> Petition   | <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final   | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Proprietary Information  |
| <input type="checkbox"/> Affidavits/declaration(s)                           | <input type="checkbox"/> Power of Attorney, Revocation                    | <input type="checkbox"/> Status Letter  |
| <input type="checkbox"/> Extension of Time Request                           | <input type="checkbox"/> Change of Correspondence Address                 | <input checked="" type="checkbox"/> Other Enclosure(s) (please Identify below):         |
| <input type="checkbox"/> Express Abandonment Request                         | <input type="checkbox"/> Terminal Disclaimer                              | PTO/SB/08B Form (2 Pages);  |
| <input checked="" type="checkbox"/> Information Disclosure Statement         | <input type="checkbox"/> Request for Refund                               | References and 1 Postcard   |
| <input type="checkbox"/> Certified Copy of Priority Document(s)              | <input type="checkbox"/> CD, Number of CD(s) _____                        |   |
| <input type="checkbox"/> Response to Missing Parts/Incomplete Application    |   |   |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 |   |   |

**Remarks**

No fee is believed due. However, if any fee is due, the Commissioner is authorized to charge any such fee and any additional fees due or credit any overpayment to Deposit Account No. 50-0951.

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual	Neil R. Jetter AKERMAN SENTERFITT
Signature	
Date	January 8, 2004

**CERTIFICATE OF TRANSMISSION/MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: January 8, 2004

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Date January 8, 2004

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re: Application of: LOCKE et al.

Application No.: 10/620,007

Examiner:

Date Filed: July 15, 2003

Group:

For: HYBRID ELECTRICAL DISCHARGE REACTORS AND  
THE USE OF ZEOLITES TO ENHANCE THE DEGRADATION  
OF CONTAMINANTS

CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being deposited  
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Neil R. Jetter

Reg. No. 46,803

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. § 1.56, Applicants hereby notify the U.S. Patent and Trademark Office of the documents which are listed on the attached Forms PTO/SB/08B which the Examiner may deem relevant to patentability of the claims of the above-identified application.

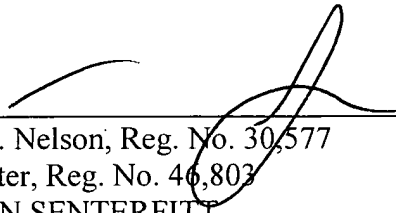
The submission of the listed documents are not intended as an admission that any listed document constitutes prior art against the claims of the present application. Applicants do not waive any right to take any action that would be appropriate to antedate or otherwise remove any listed document as a competent reference against the claims of the present application.

Applicants respectfully request that the listed documents be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO-1449 be returned in accordance with MPEP §609.

Although no fee is believed due, the Commissioner is hereby authorized to charge any fees which may be required by submission of these papers to Deposit Account No. 50-0951.

Respectfully submitted,

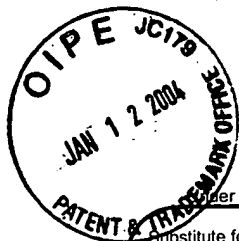
Dated: 1/8/04



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Docket No. 3303-24



PTO/SB/08B (08-03)

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Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/620,007
Filing Date	July 15, 2003
First Named Inventor	Locke et al.
Art Unit	
Examiner Name	
Attorney Docket Number	3303-24

Sheet	1	of	2
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BOSE et al., "DEGRADATION OF RDX BY VARIOUS ADVANCED OXIDATION PROCESSES: I. REACTION RATES," Wat. Res., 32:997-1004, 1998.	
		FUJII et al., "Removal of NO <sub>x</sub> by DC corona reactor with water," Journal of Electrostatics, 51-52:8-14, 2001.	
		FUJII et al., "Treatment of NO <sub>x</sub> in exhaust gas by corona plasma over water surface," Vacuum, 59:228-235, 2000.	
		GOHEEN et al., "The Degradation of Organic Dyes by Corona Discharge," Proceedings of the Second International Symposium for Chemical Oxidation: Technology for the Nineties," February 19-21, 1992.	
		GRYMONPRE et al., "Suspended Activated Carbon Particles and Ozone Formation in Aqueous-Phase Pulsed Corona Discharge Reactors," Ind. Eng. Chem. Res. 42:5117-5134, 2003.	
		GRYMONPRE et al., "The role of Fenton's reaction in aqueous phase pulsed streamer corona reactors," Chemical Engineering Journal, 82:189-207, 2001.	
		ITATANI et al., "Abatement of CF <sub>4</sub> Using Atmospheric Pressure discharge Plasma," Proceedings of the Second Asia-Pacific International Symposium on the Basis and Application of Plasma Technology, 37-38, April 19-20, 2001.	
		KATSURA et al., "NON-THERMAL PLASMA TECHNOLOGY FOR GAS TREATMENT," The Modern Problems of Electrostatics with Application in Environmental Protection, 161:12-30, 1999.	
		LUBICKI et al., "Pulsed Corona Discharge for Advanced Oxidation in Water Purification Technology," 1996 IEEE Annual Report-Conference on Electrical Insulation and Dielectric Phenomena, San Francisco, October 20-23, 1996.	
		MATSUI, et al. "Simultaneous removal of NO <sub>x</sub> and carbon soot from diesel exhaust using discharge plasma," Proceedings of the International Conference on Electrostatic Precipitation.	

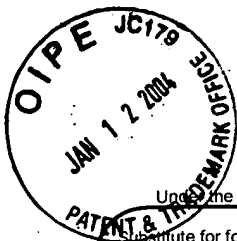
Examiner Signature	Date Considered
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	10/620,007		
		Filing Date	July 15, 2003		
		First Named Inventor	Locke et al.		
		Art Unit			
		Examiner Name			
Sheet	2	of	2	Attorney Docket Number	3303-24

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		SHARMA et al., "A Preliminary Study of Pulsed Streamer Corona Discharge for the Degradation of Phenol in Aqueous Solutions," Hazardous Waste & Hazardous Materials, 10:209-219, 1993.	
		SHARMA et al., "Destruction of Pentachlorophenol Using Glow Discharge Plasma Process," Environmental Science & Technology, 34:2267-2272, 2000.	

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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